

**REMARKS**

Applicants appreciate the Examiner's thorough examination of the subject application and request reconsideration of the subject application based on the foregoing amendments and the following remarks. Applicants also acknowledge with thanks, the Examiner's restarting of the period for responding set forth in the Office Action mailed September 12, 2005.

Claims 1-20 are pending in the subject application.

Claims 1-20 stand rejected under 35 U.S.C. §102 and/ or 35 U.S.C. §103. The Examiner also objected to claims 13<sup>1</sup>, 5, 7, 11, 13, 15, 17, 19 and 20 as contradictory and also appears to object to claims 3-20 as being identical.

Claims 1 and 2 were amended for clarity as further described herein in regards to the claim objections.

The drawing figures were objected to as allegedly failing to show claimed features. Applicants respectfully traverse the objection as discussed further herein. Thus, corrected drawing figures are not required in response to the drawing objection.

**DRAWING OBJECTIONS**

The Examiner objected to the drawing figures because the claimed feature of claims 19 and 20 ("calculating an average value") must be shown or the features canceled from the claims. Applicants respectfully traverse the objection and submit that the claimed feature is shown in the

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<sup>1</sup> The Office Action lists claim 13 twice, however, Applicants addressed the objection directed to "contradictory" on the basis that the Examiner had intended to refer to claim 3.

drawing figures.

In this regards, Applicants direct the Examiner's attention to Fig. 3 for example which shows a sum circuit 83, a counter 84 and a division circuit 85, where the division circuit 85 takes as inputs the sum from the sum circuit 83 and divides this by the count from the counter 84. It is submitted that Fig. 3 for example shows the claimed feature.

In view of the foregoing remarks, Applicants submit that the drawing figures are considered acceptable, that further correction of the drawing figures is not required and that cancellation of claimed features is not required.

#### CLAIM OBJECTIONS

As indicated herein the Examiner has objected to claims 3<sup>2</sup>, 5, 7, 11, 13 15, 17, 19 and 20 as being contradictory. It also appears from the Office Action that the Examiner also is objecting to claims 3-20 because the limitations of the claims are asserted as being identical. Because of the location of the remarks in the Office Action it is unclear whether the Examiner was objecting to the claims or was making a remarks as to the treatment of the identified claims in the discussion regarding the prior art which followed. Thus, out of an abundance of caution, Applicants treated the remarks as if the Examiner was objecting to the language.

As to the asserted identical claim limitations, Applicants would note for example that while the language of claims 3 and 4 might appear to be identical, claim 3 depends from claim 1 and claim 4 depends from claim 2. Thus, the scope of claims 3 and 4 are not identical because

each claim depends from a different base claim. The foregoing observation also applies to claims 5-20. Thus, claims 3-20 are not identical in scope.

As to the contradiction asserted in the Office Action, Applicants provide the following clarification. In this regard, Applicants have assumed that because the specific remarks in the office Action were directed to claims 1 and 2, the other identified claims were objected to because of their dependency from an objectionable base claim.

The Examiner appears to consider the claim language in claim 1 to be contradictory because the claim first recites that the reproduction characteristics of both short and long power control marks are measured (claim 1, lines 2-5) and then later recites that measuring of reproduction signal characteristics corresponding to only the short power control marks is performed. Applicants respectfully disagree that the language of claim 1 is contradictory as explained below.

Lines 2-5 of claim 1, recites that the predetermined length mark signal measurement means measures reproduction signal characteristics of both short and long power control marks. Claim 1, lines 9-13 thereof, also recite that the predetermined length measurement means *detects a specific pattern that includes the short power control mark from a bit arrangement pattern of the information data*, and measures the reproduction signal characteristics corresponding only to the short power control mark in the detected pattern. That is, from the specific pattern which includes the short power control mark along with other marks representing information data, only the reproduction signal characteristic corresponding to the short power control mark (but not the

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<sup>2</sup> See discussion in footnote no. 1.

marks representing information data) is measured. It is respectfully submitted that this is in no way contradictory to that set forth in lines 2-5 of claim 1.

Lines 9-134 of claim 1 also do not in any way suggest that reproduction signal characteristics corresponding to long power control marks are not at all measured. The language of the claim recites that the predetermined length mark signal measurement means can detect a specific pattern including a short power control mark, and from this detected specific pattern, measures only the reproducing signal characteristics corresponding to the short power control mark. Such an arrangement does not exclude or prevent the predetermined length mark signal measurement means from also measuring reproduction signal characteristics of a long power control mark, for example, when a specific pattern including a long power control mark is detected.

It is respectfully submitted that the foregoing remarks directed to claim 1 also apply to claim 2.

Notwithstanding the foregoing, Applicants have nonetheless amended each of claims 1 and 2 to make the above described arrangement appear more clear in the claims. Such amendments to claims 1 and 2 comprise a rephrasing of the original wording in the claims and thus such amendments do not add new matter. It also is noted that such amendments are also consistent with explanations or observations provided in previously submitted Response(s) by Applicants. Therefore, it also is submitted that such amendments to claims 1 and 2 should not necessitate or require further searching and/or consideration by the Examiner and thus entry of the amendment into the subject application is respectfully requested.

35 U.S.C. §102 & 103 REJECTIONS

The Examiner rejected claims 1-20 under 35 U.S.C. §102(b) as being anticipated by and/or under 35 U.S.C. §103 as being obvious over the prior art for the reasons provided on pages 4-7 of the Office Action mailed September 12, 2005. Because claims 1 and 2 were amended in the instant amendment, the following discussion refers to the language of the amended claims. However, only those amended features specifically relied upon to distinguish the claimed invention from the cited prior art shall be considered as being made to overcome the cited reference. The following addresses the identified rejections of the Examiner.

**Claims 1, 2 & 7-18**

The Examiner rejected claims 1, 2 and 7-18 under 35 U.S.C. §102(b) as being anticipated by or in the alternative under 35 U.S.C. §103 as being obvious over the acknowledge prior art further considered with JP 200099945. Applicants respectfully traverse as discussed below.

Applicants would note initially that a rejection under §102 also would appear to be inappropriate as the grounds for rejection refer to the machine assisted translations (MAT) of the secondary JP cited art. It is an axiom that for a §102 rejection to be proper the claimed invention must be disclosed in its entirety in a single reference; not a combination of references. Another secondary reference maybe be used in special circumstances and for a limited purpose; however, it appears that the JP reference is not being used in such a limited fashion but rather to provided support for disclosure not found in the admitted prior art.

In addition to the grounds for the rejection, the Examiner mentions that “The Examiner’s previous request for further identification of the prior art has been overlooked … the Examiner considers the JP system discussed in the specification - JP08-63817 as such but needs confirmation from the applicants in order to complete the search report.” In this regard, Applicants are unsure as to what prior art the Examiner is seeking further identification of as the specification clearly identifies the JP patent reference. If the Examiner’s remarks are directed to the system described in the Background of Invention portion of the subject application (pgs 9-12 thereof) concerning another method where a power control area is not provided, then it should be noted that this system was not disclosed in materials available to the public. As such, there is no documentary basis for this description. As such, it appears that the described system may not comprise prior art under §102(b) for this further reason, as the described system was not publicly disclosed as well as not being a system that was by others.

If the Examiner’s reference to the admitted prior art is contending that JP 08-63817, which is identified in the subject application, anticipates claims 1 or 2, Applicants respectfully traverse such an assertion. The cited JP reference does not disclose, teach nor suggest a predetermined length mark signal measurement means for measuring reproduction signal characteristics of a short reproducing power control mark and of a long reproducing power control mark *from information data that is recorded in a data recording area of an optical recording medium*. The cited JP reference explicitly describes and teaches that a separate reproducing power controlling region is provided in which region the power control marks are recorded. As described in the Background of Invention of the subject application, such an

arrangement is disadvantageous because the available area for recording information data is reduced (pg. 8, lines 19-25).

As to the secondary reference, JP 2000-099945, as noted above the reliance upon the disclosures of this reference necessarily undermine the assertion that JP08-63817 anticipates the claimed invention. As to the alternative suggestion that the combination of these two JP references would yield the claimed invention, Applicants respectfully traverse. The suggested combination does not overcome the deficiency identified above as to JP08-63817, namely that the power control recording marks are recorded in a separate area or region of the optical recording medium. This is because Fig. 9 and paragraph [0016] of the secondary reference (JP2000-099945) explicitly clarifies that a separate reproducing power control region is provided.

In sum, the disclosures and teachings of both JP references, whether taken alone or in combination, teach providing a separate reproducing power control region for the recording of power control marks. Thus, JP08-63817 or JP2000-099945, alone or in combination do not teach or suggest an optical reproducing device in which reproduction signal characteristics of short and long power control marks are measured *from information data that is recorded in a data recording region or area of an optical recording medium*. It also necessarily follows that there can be no teaching, suggestion or motivation offered in either reference to modify the device disclosed therein so as to be capable of doing this.

In sum, the cited art does not anticipate nor render obvious the invention of either of claim 1 or claim 2 but rather in fact teaches away from the claimed invention.

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As to claims 7-18, these claims depend respectively from one of claims 1 or 2. As such, each of claims 7-18 are considered allowable at least because of their dependency from a base claim that is considered to be allowable. This shall not, however, be considered an admission that claims 7-18 are not separately patentable from the cited art.

It is respectfully submitted that for the foregoing reasons, claims 1, 2 and 7-18 are patentable over the cited reference(s).

### **Claims 3-6**

Claims 3-6 stand rejected under 35 U.S.C. §103 as being unpatentable over the acknowledged prior art in view as applied to claims 1, 2 and 7-18 and further in view of Tanaka et al. [USP 5,825,742; “Tanaka”]. Applicants respectfully traverse as discussed below.

As to claims 3-6, these claims depend respectively from one of claims 1 or 2. As such, each of claims 3-6 are considered allowable at least because of their dependency from a base claim that is considered to be allowable. This shall not, however, be considered an admission that claims 3-6 are not separately patentable from the cited art.

Notwithstanding the foregoing, Applicants make the following observations regarding the assertions directed to Tanaka. The Examiner admits that the admitted prior art does not disclose the limitations of any of claims 3-6, but asserts that Tanaka depicts such an arrangement. Applicants respectfully disagree with the characterization of what is being taught in Tanaka.

Tanaka ( see col. 9, lines 13-20 thereof) explicitly describes and teaches that the patterns shown in Figs 9-10 thereof *are specifically used only for evaluating the edge shift of the*

*recording marks that were formed using the invention disclosed in Tanaka.* In other words, using the invention of Tanaka where information is recorded in a magneto-optical disk using up to five power values, a *first test pattern* corresponding to Fig. 9 of Tanaka and a *second test pattern* corresponding to Fig. 10 of Tanaka are formed. As described in Tanaka, using these two test patterns the edge shift of marks recorded using the invention of Tanaka can be evaluated.

From the foregoing it is clear that the patterns shown in Figs. 9-10 of Tanaka are test patterns that are used for evaluation. There is no description, teaching or suggestion that such patterns are formed in an optical storage medium and more particularly in a region which also would contain information data. Thus, one skilled in the art would not have been motivated to record the test patterns used for evaluation purposes of Tanaka into the optical storage medium such as those disclosed in the cited JP references.

Furthermore, the patterns and marks described in Tanaka are not for the purposes of assisting in the controlling of reproducing power of a light beam. Contrary to the assertion on page 7 of the Office Action, Tanaka is not illustrative of a control pulse sequence. The sequences of pulses illustrated in Figs. 9 and 10 are merely test sequences for evaluating edge shift and are not control pulses. Thus, it also does not necessarily follow that one skilled in the art would have been motivated by the test pulse sequences so as to create patterns used for controlling reproducing power of a light beam.

It is respectfully submitted that for the foregoing reasons, claims 3-6 are patentable over the cited reference(s).

**Claims 19-20**

Claims 19-20 stand rejected under 35 U.S.C. §103 as being unpatentable over the art as applied above and further in view of Okamura et al. [USP 6,288,992; “Okamura”]. Applicants respectfully traverse as discussed below.

As to claims 19-20, these claims depend respectively from one of claims 1 or 2. As such, each of claims 19-20 are considered allowable at least because of their dependency from a base claim that is considered to be allowable. This shall not, however, be considered an admission that claims 19-20 are not separately patentable from the cited art.

It is respectfully submitted that for the foregoing reasons, claims 19-20 are patentable over the cited reference(s).

The following additional remarks shall apply to each of the above.

As provided in MPEP-2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

*Verdegal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Or stated another way, “The identical invention must be shown in as complete detail as is contained in the ... claims. *Richardson v Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ 2d. 1913, 1920 (Fed. Cir. 1989). Although identify of terminology is not required, the elements must be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990). It is clear from the foregoing remarks that the above identified claims are not anticipated by the admitted prior art.

As provided in MPEP 2143.01, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some

teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F. 2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F. 2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). As provided above, the admitted prior art and the references cited, alone or in combination, include no such teaching, suggestion or motivation.

Furthermore, and as provided in MPEP 2143.02, a prior art reference can be combined or modified to reject claims as obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 19866). Additionally, it also has been held that if the proposed modification or combination would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. Further, and as provided in MPEP-2143, the teaching or suggestion to make the claimed combination and the reasonable suggestion of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). As can be seen from the forgoing discussion regarding the disclosures of the cited references and the admitted prior art, there is no reasonable expectation of success provided in the reference or the admitted prior art. Also, it is clear from the foregoing discussion that the modification suggested by the Examiner would change the principle of operation of the device disclosed in the reference.

As the USPTO Board of Patent Appeals and Interferences has held, "The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must

provide a motivation or reason for the worker in the art, without benefit of appellant's specification, to make the necessary changes in the reference device." *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ351, 353 (BD. Pat. App. & Inter. 1984). It is clear from the foregoing remarks, however, that the suggested modification to the device disclosed in the acknowledged prior art would require a modification to the operation of the disclosed device and/or is more than an obvious matter of design choice.

It is respectfully submitted that for the foregoing reasons, claims 1-20 are patentable over the cited reference(s) and thus satisfy the requirements of 35 U.S.C. §102(b) and/or §103. As such, these claims are allowable.

#### **OBVIOUSNESS DOUBLE PATENTING REJECTION(S)**

The Office Action asserts a number of grounds as to why claims of the subject application are rejectable under the judicially created doctrine of obviousness type double patenting. The Examiner further provided the reasoning why there was no statutory bar against this double patenting rejection. The following addresses separately each of the asserted rejections.

#### **Claims 1, 2, 7-12, 13-18 and 19-20**

Claims 1, 2, 7-12, 13-18 and 19-20 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1, 11/1, 12/11/1 and 9/1 of U.S. Patent No. 6,404,717 (Okamura '717"). Applicants respectfully traverse.

The above claims of the subject application provide that the reproduction signal

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characteristics of a short reproducing power control mark and a long reproducing power control mark be measured from information data that is recorded in a data recording area of an optical recording medium. None of the claims of Okamura '717 teach or suggest such a feature.

Further the pending claims provide that the predetermined length mark signal measurement means is further configured for detecting a specific pattern including the short reproducing power control mark. Such a feature also is not taught or suggested in Okamura '717. Rather Okamura '717 relies on a timing producing section to indicate when a signal quantity detecting section should sample the reproducing signal so as to correctly sample a signal from the short mark. That is, Okamura '717 is dependent upon proper timing to read from the short marks, whereas the invention of the pending claims are not so dependent.

The above difference is further clarified by Fig. 2 of Okamura '717, which shows that the invention thereof concerns a magneto-optical disk which has domains for short and long recording marks which are separate from the data recording domain. This is in contrast to the present invention where the short and long reproducing control marks are provided with the information data recorded in the data recording area of the optical recording medium.

In view of the foregoing remarks, it is respectfully submitted that the rejection has been overcome and claims 1, 2, 712, 12-18 and 19-20 are allowable.

### **Claims 1, 3 & 5**

Claims 1, 3 and 5 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claim 7/5/3 of U.S. Patent No. 6,771,576 ("Okamura

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‘576”) in view of Tanaka et al. Applicants respectfully traverse.

Claim 7 of Okamura ‘576, as with reference to the discussion above regarding Okamura ‘717, does not teach or suggest measuring the reproduction signal characteristics of long and short reproducing control marks from information data that is recorded in a data recording area of an optical medium. In fact, as apparent from Fig. 2 of Okamura ‘576, this reference is directed to a magneto-optical disk where the long and short marks are recorded in a region separate from a data recording region.

In view of the foregoing remarks, it is respectfully submitted that the rejection has been overcome and claims 1, 3 and 5 are allowable.

#### **Claims 2, 4 & 6**

Claims 2, 4 and 6 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claim 7/5/3 of U.S. Patent No. 6,771,576 (“Okamura ‘576”) in view of either of Tani of Fuji and all further considered with Tanaka et al. Applicants respectfully traverse.

The above discussion distinguishing the claims from Okamura ‘576 also apply to distinguish claims 2, 4 and 6 over claim 7/5/3 of Okamura ‘576 in view of either of Tani of Fuji and all further considered with Tanaka et al.

In view of the foregoing remarks, it is respectfully submitted that the rejection has been overcome and claims 2, 4 and 6 are allowable.

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**Claims 7-12 & 17-18**

Claims 7-12 and 17-18 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claim 7/5/3 of U.S. Patent No. 6,771,576 (“Okamura ‘576”) in view of Tanaka et al., or over claim 7/5/3 of U.S. Patent No. 6,771,576 (“Okamura ‘576”) in view of either of Tani of Fuji and all further considered with Tanaka et al.

Applicants respectfully traverse.

The above discussion distinguishing the claims from Okamura ‘576 also apply to distinguish claims 7-12 and 17-18 over claim 7/5/3 of Okamura ‘576 in view of either of Tani of Fuji and all further considered with Tanaka et al., or over claim 7/5/3 of Okamura ‘576 in view of Tanaka et al.

In view of the foregoing remarks, it is respectfully submitted that the rejection has been overcome and claims 7-12 and 17-18 are allowable.

It is respectfully submitted that the subject application is in a condition for allowance. Early and favorable action is requested.

Applicants believe that additional fees are not required for consideration of the within Response. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed

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for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit  
Account No. **04-1105**.

Respectfully submitted,  
Edwards Angell Palmer & Dodge, LLP

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